

[10191/3571]

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS AND INTERFERENCES

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In re Application of:	:
	: Examiner: Mingjen JEN
Andre BARKOWSKI et al.	:
	:
For: NAVIGATION DEVICE	:
	:
	:
Filed: October 6, 2005	: Art Unit: 3664
	:
Serial No.: 10/528,180	:
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MAIL STOP APPEAL BRIEF - PATENTS
Commissioner for Patents
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Alexandria, VA 22313-1450

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Signature: /Marcello Petrone/

REPLY BRIEF PURSUANT TO 37 C.F.R. § 41.41

SIR:

Appellants submit the present Reply Brief in response to the Examiner's Answer of February 5, 2010. *Therefore, the two-month reply brief due date is April 5, 2010.*

It is respectfully submitted that the final rejections of pending and considered claims 11 to 16 and 17 to 24 (*claims 16 and 17 were previously canceled and should not have been rejected by the Office*) should be reversed for the reasons explained below.

ARGUMENTS

A. REJECTIONS UNDER 35 U.S.C § 103(A) OF CLAIMS 11 TO 16, 19, 20 AND 21

Claims 11 to 16, 19, 20, and 21 were rejected under 35 U.S.C. 103(a) as unpatentable over U.S. Patent Application No. 2002/0049534 to Yuda et al., (“Yuda”), in view of U.S. Application No. 2002/0198632 to Breed et al. (“Breed”).

To reject a claim under 35 U.S.C. § 103(a), the Office bears the initial burden of presenting a *prima facie* case of obviousness. *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). To establish *prima facie* obviousness, three criteria must be satisfied. First, there must be some suggestion or motivation to modify or combine reference teachings. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). This teaching or suggestion to make the claimed combination must be found in the prior art and not based on the application disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991).

Also, as clearly indicated by the Supreme Court in *KSR*, it is “important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements” in the manner claimed. *See KSR Int’l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727 (2007). In this regard, the Supreme Court further noted that “rejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *Id.*, at 1396. Second, there must be a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 U.S.P.Q. 375 (Fed. Cir. 1986). Third, the prior art reference(s) must teach or suggest all of the claim features. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974).

Still further, to reject a claim as obvious under 35 U.S.C. § 103, the prior art must disclose or suggest each claim feature and it must also provide a motivation or suggestion for combining the features in the manner contemplated by the claim. (See *Northern Telecom, Inc. v. Datapoint Corp.*, 908 F.2d 931, 934 (Fed. Cir. 1990), cert. denied, 111 S. Ct. 296 (1990); *In re Bond*, 910 F.2d 831, 834 (Fed. Cir. 1990)). Thus, the “problem confronted by the inventor must be considered in determining whether it would have been obvious to

combine the references in order to solve the problem,” Diversitech Corp. v. Century Steps, Inc., 850 F.2d 675, 679 (Fed. Cir. 1998).

CLAIMS 11, 12, 14, 15, AND 20

The Yuda reference concerns an apparatus for navigating a moving object for easing the action of an operator of the moving object. The apparatus has a map data acquiring section, a current position data acquiring section, an optimum route searching section for calculating an optimum route data from the map data, a forward map data acquiring section for generating a forward map data from the current position data and the optimum route data, a route navigation symbol data drawing section for generating a route navigation symbol image from the forward map data, and a stereoscopic image displaying section for displaying a three-dimensional form of the route navigation symbol image. (*See Yuda*, Abstract).

Accordingly, the Yuda reference does not disclose or suggest the claim 11 feature of a “*guide object* along the calculated travel route being displayed in relation to a traffic route, whereby the ***movement*** of the *guide object* represents driving maneuvers to be performed,” as provided for in the context of the claimed subject matter.

In this regard, the Specification of the present application specifically discloses (in view of which the claims must be interpreted) “that the driver merely needs to follow along and emulate the appropriate driving maneuvers. Thus, the *need for converting symbolic, optical displays or acoustic instructions into an active driving maneuver, is eliminated.*” (*Specification*, page 1, lines 30 to 31, to page 2, lines 1 to 3, emphasis added).

Any review of the Yuda reference makes clear that it does not disclose or suggest a *guide object*, the movement of which represents *driving maneuvers to be performed* by a driver, as provided for in the context of the claimed subject matter. In fact, the cited section relied upon by the Final Office Action merely discusses a symbol to be generated when decisions need to be made, not a guide object to emulate its movements, since it specifically states as follows:

As the vehicle arrives *N meters before the crossroads for turning to left or right*, the route navigation symbol data generating section 23 generates a route navigation symbol data including a symbol model information for displaying “a model with blinkers and brake-lamps” and a route direction identification display information for displaying “*blinker flashing*” ... in response to

the route direction data for the forward map data, indicating the direction ...

(Yuda, paragraph [0079], emphasis added).

Accordingly, the Yuda reference merely refers to a *symbol representing the vehicle to be generated when decisions need to be made* (i.e., when the vehicle N meters before the crossroads). The symbol merely indicates (to a driver who recognizes the symbology of the Yuda device), given your current position, whether to turn left or right by blinkers on a symbol model representing the vehicle or whether to take some other action based on the nature of the route navigation symbol image being displayed. However, to perform the maneuver indicated by the route navigation symbol image the driver must first know what each of the different possible route navigation symbol images represent. In stark contrast to the claimed subject matter, the driver still needs to *convert the symbolic, optical displays and instructions (like brake lights, flashing blinkers, etc.) into an active driving maneuver*.

For example, there is a difference between being told where to turn and following another vehicle (represented by the guide object). Thus, even if the device of the Yuda reference presents the driver with an image that can inform a driver whether to turn left or right by turn-signals when decisions need to be made, this does not disclose nor suggest a *guide object, the movement of which represents driving maneuvers to be performed* that the driver merely needs to follow along and emulate, as provided in the context of the claimed subject matter (and as explained in the specification).

In the Answer, at paragraph (10) “Response to Argument”, it is asserted that the navigational symbol is the guide object, where the navigational symbol represents the driving maneuvers to be performed by the driver. However, as explained above, in the presently claimed device, the driving maneuvers to be performed by the driver are represented by the movement of a guide object.

It is also conclusorily asserted that it is inherent in any navigational system that a driver merely needs to follow along and emulate the appropriate driving maneuvers. However, as explained above, the device of the Yuda reference does not present the driver with a moving guide object, the driving maneuvers of which the driver could “follow along and emulate”.

Also, in response to the assertion that the features being relied upon in the arguments are not recited in the rejected claims, it is respectfully submitted that the features of a “*guide object* along the calculated travel route being displayed in relation to a traffic route, whereby the ***movement of the guide object represents driving maneuvers to be performed***” are clearly present in claim 11 as presented.

As to the secondary Breed reference, it does not cure – and it is not asserted to cure -- this critical deficiency.

Furthermore, Yuda does not describe or even suggest the feature of adaptively controlling the movement of the guide object *depending on the traffic situation*. In particular, a movement of the navigation symbol image with a car model, if any, depends entirely upon the *current location of the vehicle itself*. As explained above, to activate the navigation symbol image 50 of Yuda, the vehicle itself must have arrived at a certain location. (Yuda, paragraphs [0079], [0081]). Even if Yuda did refer to activation of an image of a car model in accordance with the location of the vehicle, this does not describe or suggest an arrangement for adaptively controlling the **movement** of the guide object *depending on the traffic information* determined by sensing other vehicles in an area surrounding the guided vehicle, as provided for in the context of the claimed subject matter.

As to the secondary Breed reference, in the Answer, at paragraph (10) “Response to Argument”, it is conclusorily asserted that Breed, at paragraph 46, somehow provides a neural network that receives information regarding the traffic situation from a video camera and outputs the direction that the vehicle should head based on the traffic situation. Even if this were so, this does not cure the deficiency of the device of the Yuda reference because it does not disclose or suggest controlling the **movement** of the guide object *depending on the traffic information*, as provided for in the context of the presently claimed subject matter.

Furthermore, prior art references must be considered as a whole, including portions that teach away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540 (Fed. Cir. 1983). Furthermore, *prima facie* obviousness cannot be established based on a modification of a reference that destroys the intent, purpose, or function of the invention disclosed in the reference, since there is no suggestion or motivation to make the proposed modification. *See In re Gordon*, 733 F.2d 900, 221 U.S.P.Q. 1125 (Fed. Cir. 1984). The Breed reference teaches away from the claimed subject matter since it specifically

requires communication between vehicles. In this regard, the Breed reference states as follows:

[For] the vehicle control system to function without error, certain types of information ***must** be accurately provided*. These include information permitting the vehicle to determine its absolute location and *means for vehicles near each other to communicate this location information to each other*.

(*Breed*, paragraph [0026], emphasis added).

In this regard, the Yuda reference does not require communication *between vehicles nor road-condition information*. Accordingly, the Breed reference teaches away from systems that do not necessitate or require communication between vehicles and road-condition information. For at least this reason it would not be obvious to combine the Yuda and Breed references, as conclusorily asserted by the Answer and by the Office Actions to date.

The Answer, at paragraph (10) “Response to Argument”, asserts that the prior art merely discloses more than one alternative and does not constitute taching away. However, as explained above, the Breed reference states that for the vehicle control system to function without error, certain types of information ***must** be accurately provided*. These include information permitting the vehicle to determine its absolute location and *means for vehicles near each other to communicate this location information to each other*.

Accordingly, claim 11 is allowable, as are its dependent claims 12, 14, 15, 18 and 20. Withdrawal of the obviousness rejections of claims 12, 14, 15, 18 and 20 is therefore respectfully requested.

CLAIM 13

Claim 13 depends from claim 11 and it is therefore allowable for at least the same reasons as claim 11.

Still further, the subject matter of claim 13 (which depends from claim 11) further includes the feature *in which the guide object is displayed at a selected distance **in front of a current position of the vehicle** on the travel route in relation to the traffic route*. Any review of the Yuda reference makes plain that the above highlighted features are not disclosed or suggested. As to cited paragraph [0061], it does not disclose a guide object **in front of a**

current position of the vehicle. Indeed, any guide object in Yuda is with respect to the current actual position of the vehicle and is not in **front** of the current position, as in claim 13. In this regard, Yuda specifically states the following:

[W]hen the vehicle arrives at the highway exit C, as shown in FIG. 5, the route navigation symbol image generating section 24 generates a route navigation symbol image 50 showing a car model with its left blinker 52 and brake lamps 53 flashing.

(Yuda, paragraph [0081, emphasis added). Thus, navigation symbol image 50 is to the actual vehicle when it already is at a certain point and not to a guide object in front of the vehicle. Accordingly, Yuda does not disclose or suggest a guide object in front of a current position of the vehicle, let alone at a selected distance, as provided for in the context of the claimed subject matter. The secondary Breed reference does not cure – and is not asserted to cure – this critical deficiency.

For at least the foregoing reasons, claim 13 is allowable. Withdrawal of the obviousness rejection of claim 13 is therefore respectfully requested.

CLAIM 16

It is respectfully submitted that the rejection of claim 16 is improper because it was previously canceled without prejudice.

CLAIM 19

Claim 19 depends from claim 11 and it is therefore allowable for at least the same reasons as claim 11.

Still further, the subject matter of claim 19 (which depends from claim 11) further includes *a display area for displaying at least one of directional displays and **warning displays** associated with a driving maneuver to be performed.* The Yuda reference does not disclose or suggest this feature. Even if the Yuda reference did refer to directional displays, these do not disclose *warning displays*, as provided for in the context of the claimed subject matter. In this regard the specification of the present application discloses the following:

[A] display of the guide object may be controlled if there is an obstacle arranged in front of the vehicle or a vehicle traveling in front of the vehicle in such a manner that the guide object is suitably delayed and made to virtually approach the obstacle at

an adapted velocity. The driver, ...may then react already to this **warning display** of the guide object and adapt his/her velocity accordingly.... To aid the driver, other display fields are ... provided to warn him/her of other dangers or to display traffic signs sensed by an optical unit.

(*Specification*, page 3, lines 10 to 30, emphasis added.) Thus, the warning display of the present application warns the driver of impending dangers.

The Answer, at paragraph (10) “Response to Argument”, conclusorily asserts that Yuda, at paragraph 73, somehow discloses a warning display for displaying navigation images in response to traffic sign data “school zone” or “highway exit”; however, the cited portion plainly shows that the Yuda reference merely provides navigational instructions not associated to any dangers involved in a maneuver to be executed by the driver.

Accordingly, Yuda does not disclose or suggest directional displays *and warning displays* associated with a driving maneuver to be performed, as provided for in the context of claim 19 and the specification. The secondary Breed reference does not cure – and is not asserted to cure – this critical deficiency.

For at least the foregoing reasons, claim 19 is allowable. Withdrawal of the obviousness rejection of claim 19 is therefore respectfully requested.

CLAIM 21

Claim 21 depends from claim 11 and it is therefore allowable for at least the same reasons as claim 11. Still further, the subject matter of claim 21 (which depends from claim 11) further includes features similar to those of claims 12, 13, 14, and 15, and it is therefore allowable for essentially the same reasons as claims 12, 13, 14, and 15.

Withdrawal of the obviousness rejection of claim 21 is therefore respectfully requested.

B. REJECTIONS UNDER 35 U.S.C § 103(A) OF CLAIMS 17, 18 AND 22 TO 24

Claims 17, 18, and 22 to 24 were rejected under 35 U.S.C. 103(a) as unpatentable over the Yuda reference, in view of the Breed reference in further view of the Hall reference.

CLAIM 17

It is respectfully submitted that the rejection of claim 17 is improper because it was previously canceled without prejudice.

CLAIM 18

Claim 18 depends from claim 11 and it is therefore allowable for at least the same reasons as claim 11 because the Hall reference does not cure – and is not asserted to cure – the critical deficiencies of the Yuda and Breed references.

Withdrawal of the obviousness rejection of claim 18 is therefore respectfully requested.

CLAIM 23

Claim 23 depends from claim 11 and it is therefore allowable for at least the same reasons as claim 11. Still further, the subject matter of claim 23 (which depends from claim 11) further includes features similar to those of claims 12, 13, 14, 15, 18, 19, and 20, and it is therefore allowable for essentially the same reasons as claims 12, 13, 14, 15, 18, 19, and 20, since the Hall reference does not cure – and is not asserted to cure – the critical deficiencies of the Yuda and Breed references.

Withdrawal of the obviousness rejection of claim 23 is therefore respectfully requested.

CLAIM 24

Claim 24 includes features similar to those of claim 11 and it is therefore allowable for at least the same reasons as claim 11 because the Hall reference does not cure – and is not asserted to cure – the critical deficiencies of the Yuda and Breed references.

Withdrawal of the obviousness rejection of claim 24 is therefore respectfully requested.

As further regard the obviousness rejections, the “problem confronted by the inventor must be considered in determining whether it would have been obvious to combine the references in order to solve the problem.” (See Diversitech Corp. v. Century Steps, Inc., 850

F.2d 675, 679 (Fed. Cir. 1998)). It is respectfully submitted that, as discussed above, the references relied on, whether taken alone or combined, do not suggest in any way modifying or combining the references so as to provide the presently claimed subject matter for addressing the problems and/or providing the benefits discussed in the specification.

The cases of In re Fine, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988), and In re Jones, 21 U.S.P.Q.2d 1941 (Fed. Cir. 1992), also make plain that the Final Office Action's assertions that it would have been obvious to modify the reference relied upon does not properly support a § 103 rejection. It is respectfully suggested that those cases make plain that the Final Office Action reflects a subjective “obvious to try” standard, and therefore does not reflect the proper evidence to support an obviousness rejection based on the references relied upon. In particular, the Court in the case of In re Fine stated that:

Instead, the Examiner relies on hindsight in reaching his obviousness determination. . . . **One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.**

In re Fine, 5 U.S.P.Q.2d at 1600 (citations omitted; emphasis added). Likewise, the Court in the case of In re Jones stated that:

Before the PTO may combine the disclosures of two or more prior art references in order to establish *prima facie* obviousness, there must be some suggestion for doing so, found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. . . .

Conspicuously missing from this record is any evidence, other than the PTO's speculation (if it be called evidence) that one of ordinary skill . . . would have been motivated to make the modifications . . . necessary to arrive at the claimed [invention].

In re Jones, 21 U.S.P.Q.2d at 1943 & 1944 (citations omitted; italics in original).

That is exactly the case here since it is believed and respectfully submitted that the Answer and the Office Actions to date reflect hindsight, reconstruction and speculation, which these cases have indicated does not constitute evidence that will support a proper obviousness finding.

Also, the Federal Circuit in the case of In re Kotzab made plain that even if a claim concerns a “technologically simple concept” — which is not even the case here, there still must be some finding as to the “specific understanding or principle within the knowledge of a skilled artisan” that would motivate a person having no knowledge of the claimed subject matter to “make the combination in the manner claimed”, stating that:

In this case, the Examiner and the Board fell into the hindsight trap. The idea of a single sensor controlling multiple valves, as opposed to multiple sensors controlling multiple valves, is a technologically simple concept. *With this simple concept in mind, the Patent and Trademark Office found prior art statements that in the abstract appeared to suggest the claimed limitation. But, there was no finding as to the specific understanding or principle within the knowledge of a skilled artisan that would have motivated one with no knowledge of Kotzab's invention to make the combination in the manner claimed.* In light of our holding of the absence of a motivation to combine the teachings in Evans, we conclude that the Board did not make out a proper *prima facie* case of obviousness in rejecting [the] claims . . . under 35 U.S.C. Section 103(a) over Evans.

(See In re Kotzab, 55 U.S.P.Q.2d 1313, 1318 (Federal Circuit 2000) (italics added)). Here again, it is believed that there have been no such findings to establish that the features discussed above of the rejected claims are met by the reference relied upon. As referred to above, any review of the reference relied upon makes plain that it simply does not describe the features discussed above of the claims as now presented.

Thus, the proper evidence of obviousness must show why there is a suggestion as to the reference so as to provide the subject matter of the claimed subject matter and its benefits.

In short, there is no evidence that the reference relied upon, whether taken alone or otherwise, would provide the features of the claims discussed above. It is therefore respectfully submitted that the claims are allowable for these reasons.

As also regards the obviousness rejections of the claims, it is respectfully submitted that not even a *prima facie* case has been made in the present case for obviousness, since the Office Actions to date never made any findings, such as, for example, regarding in any way whatsoever what a person having ordinary skill in the art would have been at the time the claimed subject matter of the present application was made. (See In re Rouffet, 47 U.S.P.Q.2d

1453, 1455 (Fed. Cir. 1998) (the “factual predicates underlying” a *prima facie* “obviousness determination include the scope and content of the prior art, the differences between the prior art and the claimed invention, and the level of ordinary skill in the art”). It is respectfully submitted that the proper test for showing obviousness is what the “combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art”, and that the Patent Office must provide particular findings in this regard — the evidence for which does not include “broad conclusory statements standing alone”. (See *In re Kotzab*, 55 U.S.P.Q. 2d 1313, 1317 (Fed. Cir. 2000) (citing *In re Dembiczak*, 50 U.S.P.Q.2d 1614, 1618 (Fed. Cir. 1999) (obviousness rejections reversed where no findings were made “concerning the identification of the relevant art”, the “level of ordinary skill in the art” or “the nature of the problem to be solved”))). It is respectfully submitted that there has been no such showings by the Office Actions to date or by the Advisory Action.

In fact, the present lack of any of the required factual findings forces both Appellants and this Board to resort to unwarranted speculation to ascertain exactly what facts underly the present obviousness rejections. The law mandates that the allocation of the proof burdens requires that the Patent Office provide the factual basis for rejecting a patent application under 35 U.S.C. § 103. (See *In re Piasecki*, 745 F.2d 1468, 1472, 223 U.S.P.Q. 785, 788 (Fed. Cir. 1984) (citing *In re Warner*, 379 F.2d 1011, 1016, 154 U.S.P.Q. 173, 177 (C.C.P.A. 1967))). In short, the Examiner bears the initial burden of presenting a proper *prima facie* unpatentability case — which has not been met in the present case. (See *In re Oetiker*, 977 F.2d 1443, 1445, 24, U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992)).

As further regards all of the obviousness rejections, the Examiner has not provided specific evidence to establish those assertions and/or contentions that may be supported by the Official Notices under 37 C.F.R. § 1.104(d)(2) or otherwise. In particular, it is respectfully submitted that, although it has been previously requested, the Examiner has not provided an affidavit and/or published information concerning these assertions. The § 103 rejections were apparently being based on assertions that draw on facts within the personal knowledge of the Examiner, but no support was provided for these otherwise conclusory and unsupported assertions. (See also MPEP § 2144.03).

Accordingly, claims 11 to 15 and 18 to 24 (*claims 16 and 17 were previously canceled and therefore should not have been rejected*) are allowable and the rejections should therefore be reversed.

CONCLUSION

In view of the above, it is respectfully requested that the rejections of claims 11 to 16 and 17 to 24 be reversed (*claims 16 and 17 were previously canceled and therefore should not have been rejected*), and that these claims be allowed as presented.

Respectfully submitted,

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